

PROJECT SYNOPSIS

Title of the Project :

Secondary School Result Analysis System (SSRAS)

Problem Definition:

Design a Project to analyze the data set of Secondary School Result and calculate Total marks of 5 main subjects, their percentage of marks obtained, Ten toppers, distinctions in each subject, Subject wise pass, fail and essential repeat, Overall pass% and fail%, Number and percentage of students in a specific range, Students getting 90% and above in aggregate.

Contribution / Team members:

A. K. Pandey, PGT Computer Sc.

Team Detail:

The Project "SSRAS" is developed by Mr. A K. Pandey, it took approx. 15 days to develop this project, working 1.5 Hours daily. All modules completed by me only as per my view and knowledge.

Reason for choosing the Topic:

Because every year when CBSE declares the Result of Class-10th (Secondary Class), It has to be analyzed by our teachers either manually or using calculator, then and calculating Total, percentage, toppers, range analysis is a tedious and tiring job for our teachers. Some Computer savvy teachers make these calculations on the spreadsheets etc after data alignment from text file to excel sheet, which is really a tiring job. That's why to simplify their task, to give them relief from manual work, and to minimize their burden, I took the challenge and started working with this project to automate their job using Python programming.

Objective:

To analyze the Result of Secondary School Class-10th overall.
To Calculate Total and Percentage of marks obtained by each student
To find 10 Top scorers of the School
To compare number of students vs number of distinctions in each subject
To compare total no. of pass vs total number of students appeared in each subject
To display students getting 90% and above overall.
To show graphically number and percentage of students with in various ranges.
To show graphically percentage of Pass vs fail students overall.

Hardware Requirements:

A Computer/Laptop with
Operating System-Windows 7 or above
x86 64-bit CPU (Intel / AMD architecture)
4 GB RAM.
5 GB free disk space.

Software Requirements:

Python 3.6.x or higher version
Pandas Library preinstalled
Matplotlib Library preinstalled
Ms-Office installed

Limitations:

- 1- It is not web based project
- 2- Needs more customization to fulfill the need of every school.
- 3- More functionality can be added as per requirement.
- 4- No provision to print hard copies.

References / Bibliography:

- > Source of csv File - Created from the CBSE Result of class 10th
- > Online Python documentation - for python command syntax
- > Text book - Class XI and XII - Informatics Practices NCERT
- > Google.com - For any online queries
- > cbseresults.nic.in - For Text file of the result (Converted into csv)

